Figure 1

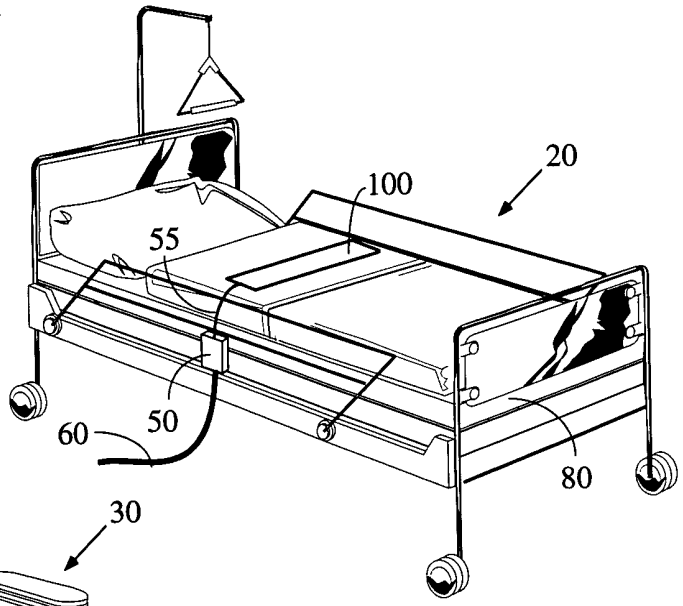
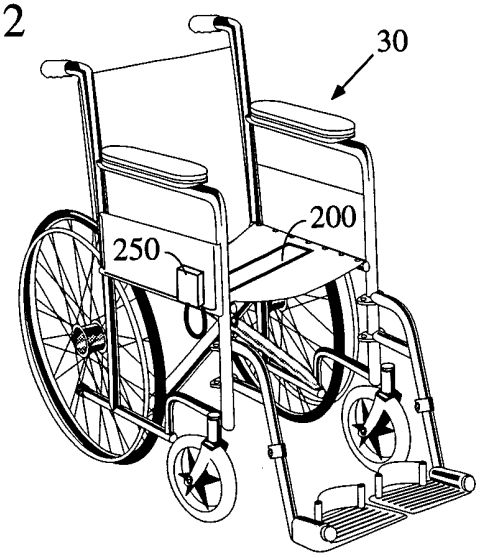


Figure 2



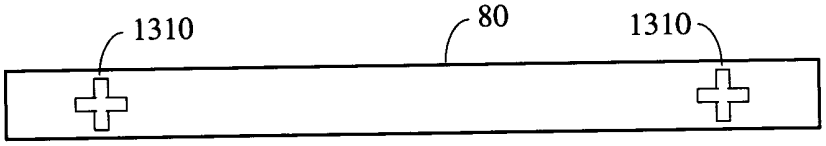


Figure 13A

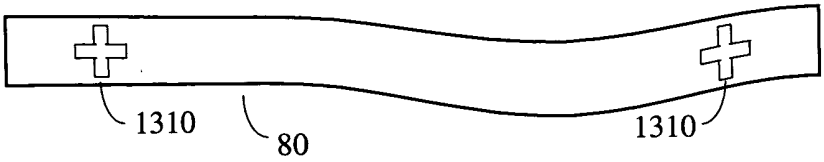


Figure 13B

FIGURE 3

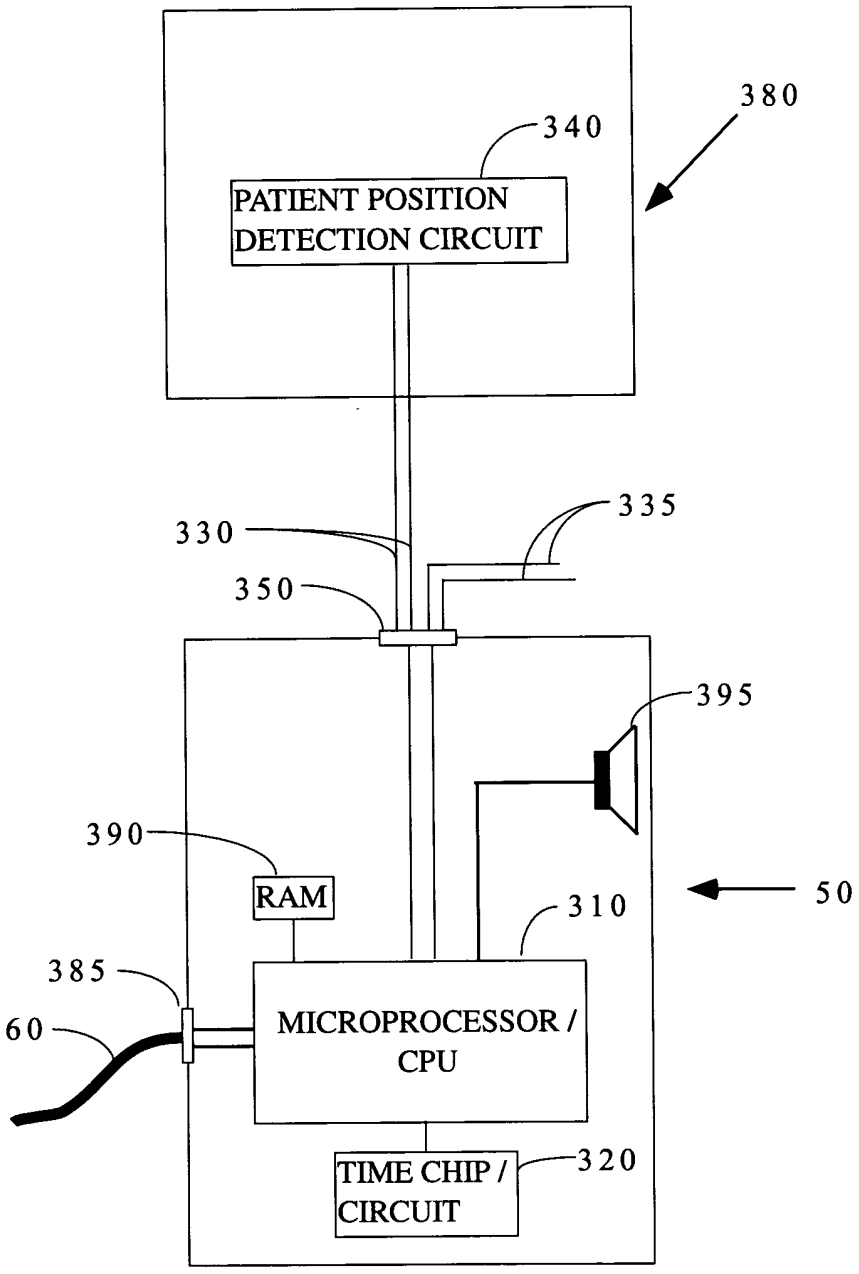

380
340
PATIENT POSITION DETECTION CIRCUIT
335
330
350
395
390
RAM
50
310
385
60
MICROPROCESSOR / CPU
320
TIME CHIP / CIRCUIT

FIGURE 4

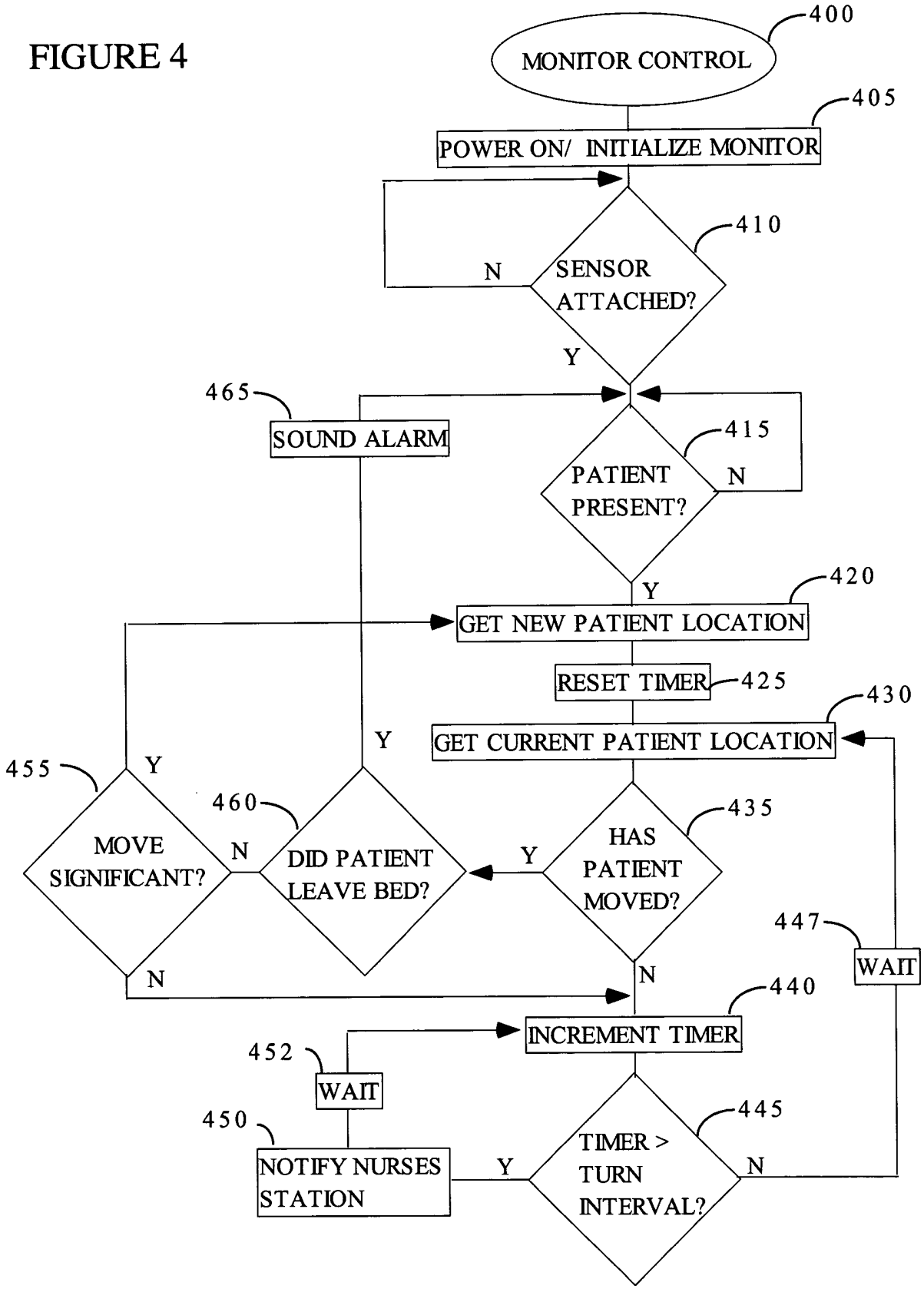

400
MONITOR CONTROL
405
POWER ON/ INITIALIZE MONITOR
410
SENSOR ATTACHED?
N
Y
465
SOUND ALARM
415
PATIENT PRESENT?
N
Y
420
GET NEW PATIENT LOCATION
RESET TIMER
425
430
GET CURRENT PATIENT LOCATION
455
Y
MOVE SIGNIFICANT?
N
460
DID PATIENT LEAVE BED?
Y
435
HAS PATIENT MOVED?
Y
N
N
447
WAIT
440
INCREMENT TIMER
452
WAIT
450
NOTIFY NURSES STATION
445
TIMER > TURN INTERVAL?
Y
N

Figure 5

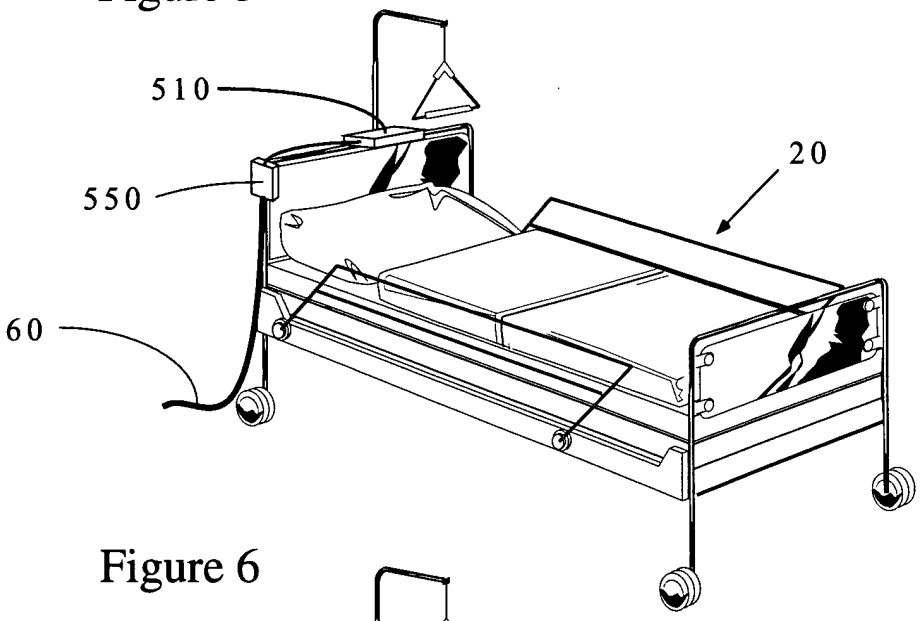


Figure 6

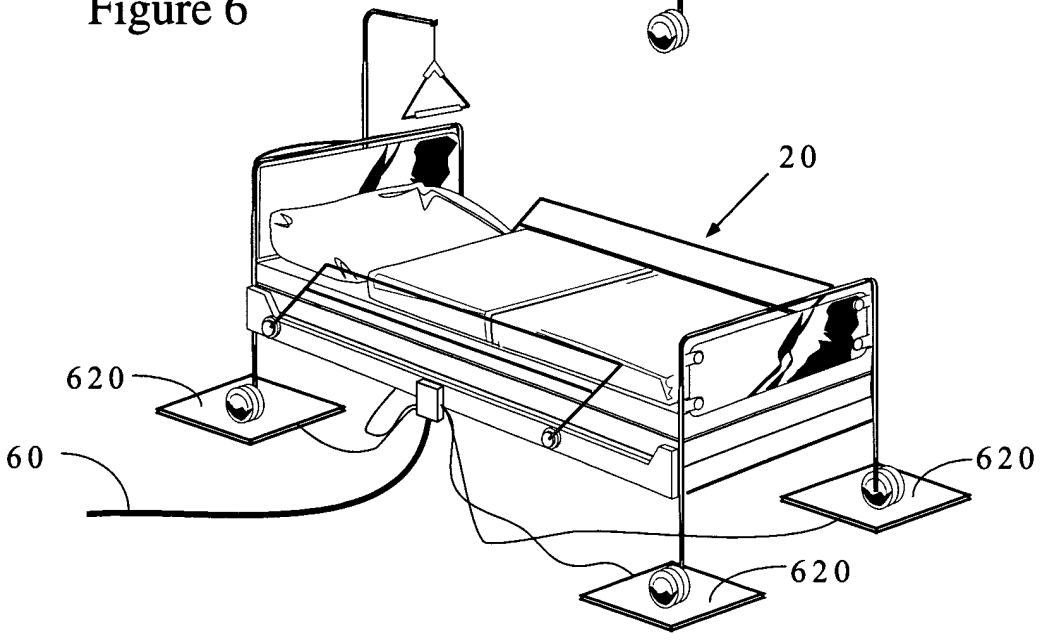


Figure 7

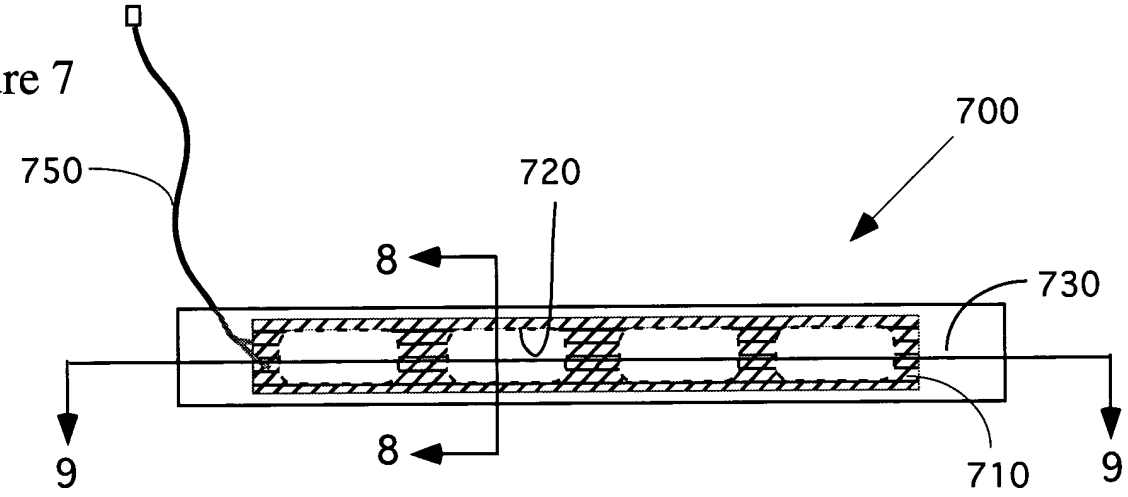


Figure 8

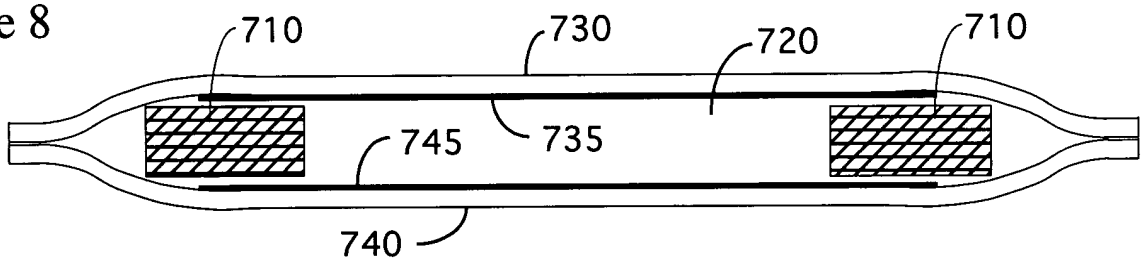


Figure 9A

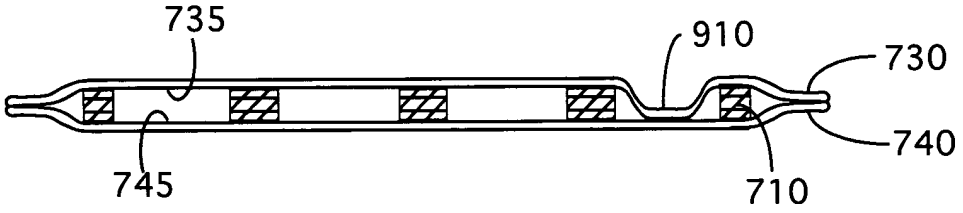


Figure 9B

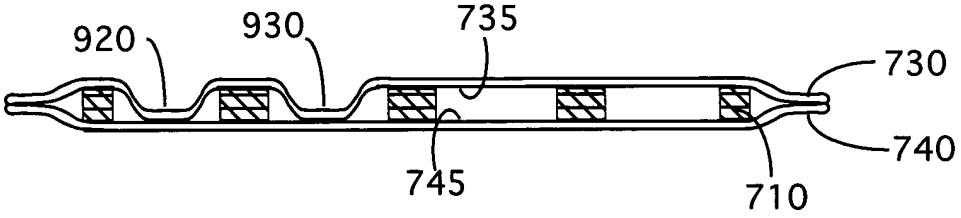


Figure 10A

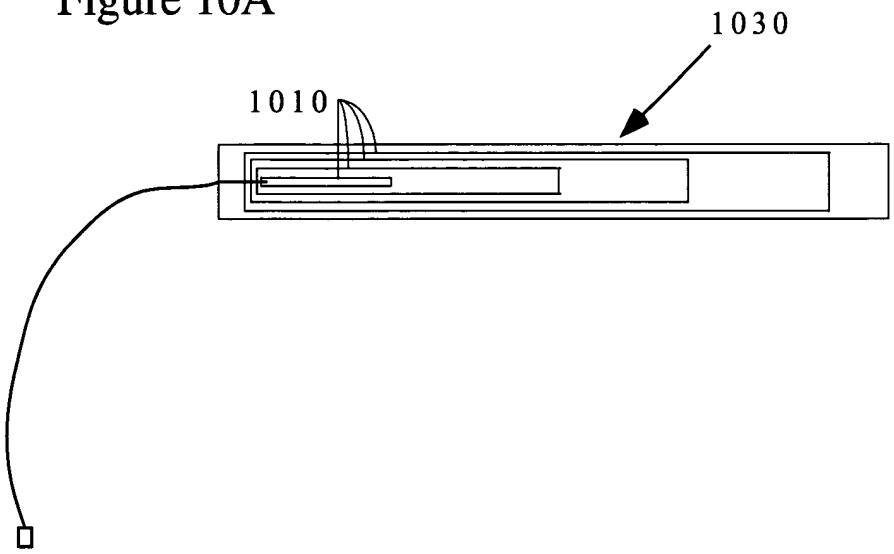


Figure 10B

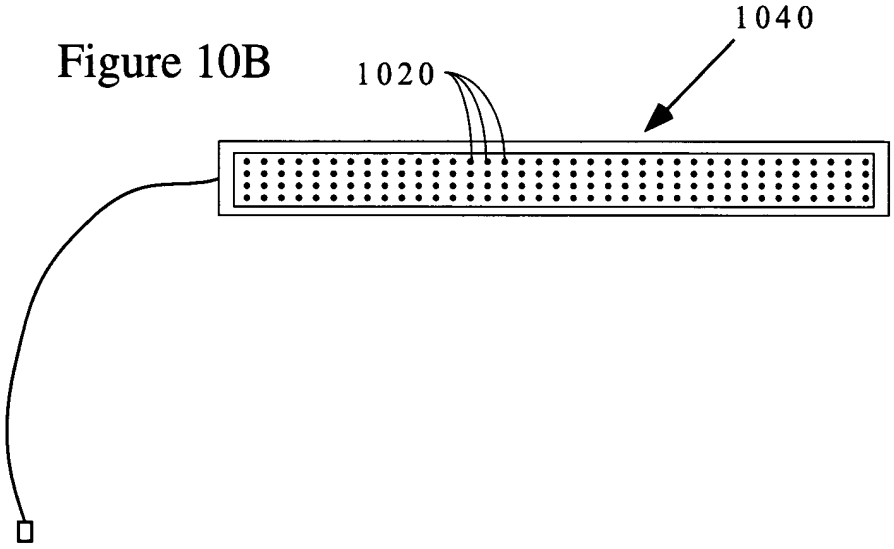


Figure 11

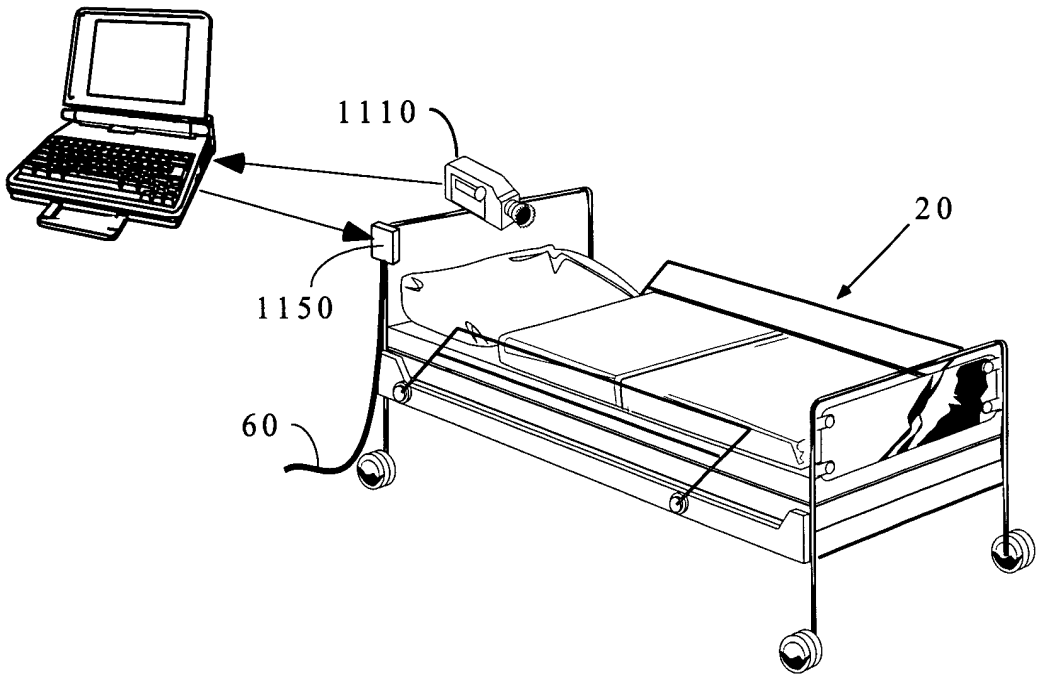


FIGURE 12A

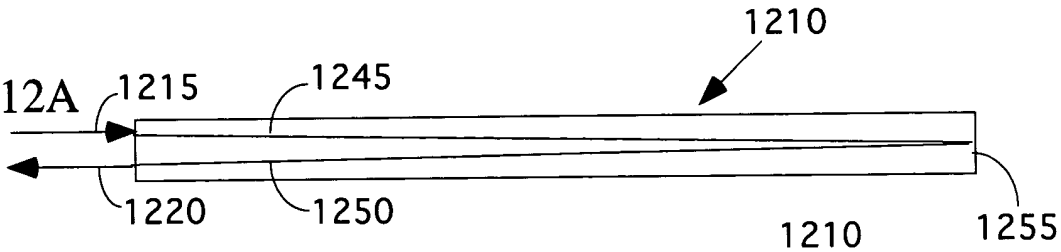


FIGURE 12B

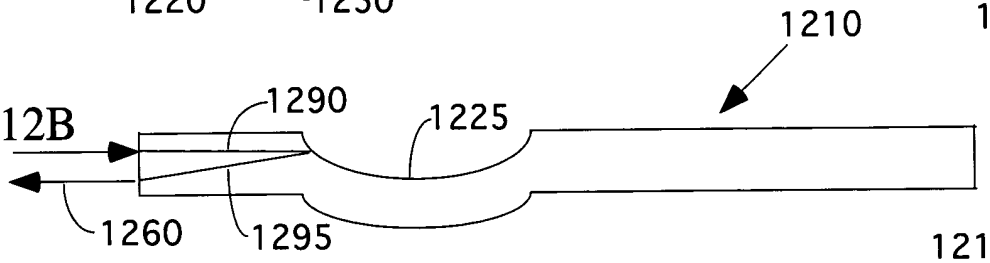


FIGURE 12C

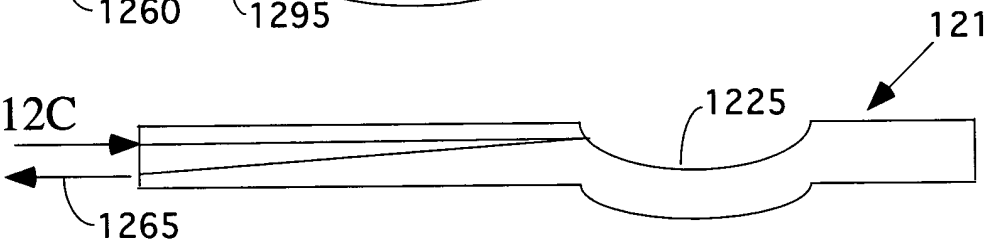


FIGURE 12D

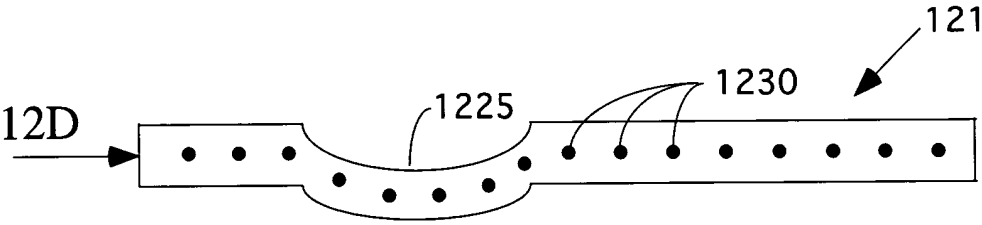


FIGURE 12E

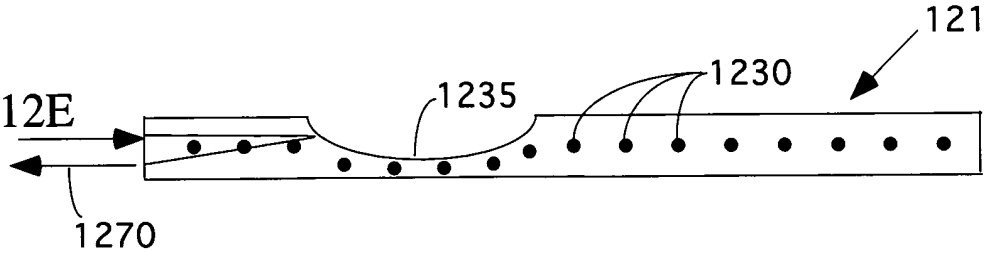
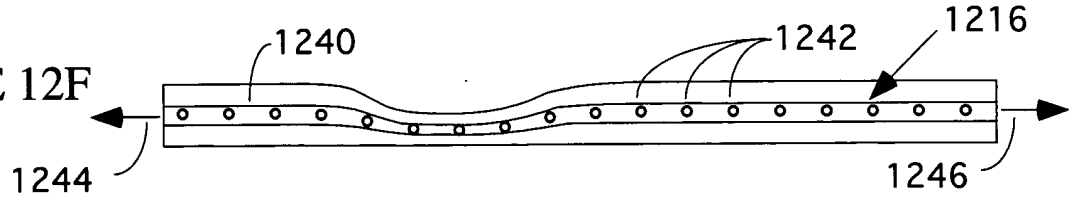



FIGURE 12F